

element is moved and controlled according to a calibration velocity profile to dispense material into the dish during a calibration routine, and wherein the calibration velocity profile is representative of the dispensing velocity profile.

9. (Amended) The system of claim 8, wherein the controller is constructed and arranged to apply a scale factor to the dispensing velocity profile to obtain the calibration velocity profile.

13. (Amended) The system of claim 1, wherein the calibration velocity profile is the same as the dispensing velocity profile.

22. (Amended) A system for dispensing a material onto a substrate, the system comprising:

a dispensing element having a metering device that controls a quantity of material dispensed from the dispensing element;

a positioning system coupled to the dispensing element to move the dispensing element over the substrate in accordance with a dispensing velocity profile;

a calibration device having a dish that receives material from the dispensing element during a calibration routine of the dispensing system;

means for moving the dispensing element according to a calibration velocity profile that is representative of the dispensing velocity profile to dispense material into the dish during the calibration routine; and

means for determining the quantity of material dispensed during the calibration routine.

26. (New) A calibration apparatus for calibrating the amount of material dispensed from a pump, the apparatus comprising:

a positioning system coupled to the pump to move the pump in accordance with a predetermined dispensing velocity profile;

a pre-dispense assembly having a dish that receives the material dispensed from the pump during a calibration routine;

a controller to control the positioning system and the pump such that the pump is moved according to a calibration velocity profile, wherein the calibration velocity profile is representative of the dispensing velocity profile of the pump; and

a weighing device for determining the weight of the material released from the pump during the calibration routine.

27. (New) The apparatus of claim 26, wherein the dish is removably connected to the pre-dispense assembly.

28. (New) The apparatus of claim 26, wherein the dish further includes a tab for conveying the dish to or from the pre-dispense assembly.

29. (New) The apparatus of claim 26, wherein the weight of the material dispensed during the calibration routine is compared with a target weight of material to determine an error value.

30. (New) The apparatus of claim 29, wherein the apparatus is constructed and arranged to adjust a speed of movement of the pump when the error value is greater than a predefined value.

31. (New) The apparatus of claim 26, wherein the controller is constructed and arranged to apply a scale factor to the dispensing velocity profile to obtain the calibration velocity profile.

32. (New) The apparatus of claim 26, wherein the calibration velocity profile is the same as the dispensing velocity profile.